

CLAIMS

1. A program list display device which is installed in a broadcast receiver having a video recording and playback function and displays a list of program information for a program selection on a display screen, comprising:

a program list display means for displaying the program information for programs scheduled to be broadcast and the program information for past recorded programs as a program list on a single screen, wherein

the program information comprises one or more program attributes of a channel attribute which shows a channel of the program, a date and hour attribute which shows broadcast date and hour of the program, a program name attribute which shows a title of the program, a category attribute which shows a category to which the program belongs, and a media attribute which shows a storage medium in which the program is recorded.

2. The program list display device of Claim 1 wherein

the program list display means displays the program information as a program list in a two-dimensional array having a first program attribute arbitrarily selected from the plural program attributes on a first axis and a second program attribute arbitrarily selected from the plural program attributes on a second axis.

3. The program list display device of Claim 1 wherein

the program list display means classifies the program information into groups on the basis of a value for a first program attribute arbitrarily selected from the plural program attributes and displays the program information which belong to the respective groups as a program list in a one-dimensional array having a second program attribute arbitrarily selected from the program attribute group on an axis.

4. The program list display device of Claim 1 wherein

the program list display means dynamically switches between a case where the program list display means displays the program information as the program list in the two-dimensional array having the first program attribute arbitrarily selected from the plural program attributes on the first axis and the second program attribute arbitrarily selected from the plural program attributes on the second axis and a case where the program list display means classifies the program information into groups on the basis of the value for the first program attribute arbitrarily selected from the plural program attributes and displays the program information which belong to the respective groups as the program list in the one-dimensional array having the second program attribute arbitrarily selected from the program attribute group on the

axis.

5. A program list display device which is installed in a broadcast receiver and displays a list of program information for a program selection on a display screen, comprising:

a program list display means for displaying the program information for programs scheduled to be broadcast as a program list on a single screen, wherein

the program information comprises one or more program attributes of a channel attribute which shows a channel on which the program is broadcast, a date and hour attribute which shows date and hour when the program is broadcast, a program name attribute which shows a title of the program, a category attribute into which the program contents are classified, and

the program list display means displays the program information as a program list in a two-dimensional array having a first program attribute arbitrarily selected from the plural program attributes on a first axis and a second program attribute arbitrarily selected from the program attribute group on a second axis.

6. A program list display device which is installed in a broadcast receiver and displays a list of program information for a program selection on a display screen, comprising:

a program list display means for displaying the program

information for programs scheduled to be broadcast as a program list on a single screen, wherein

the program information comprises one or more program attributes of the channel attribute which shows the channel on which the program is broadcast, the date and hour attribute which shows date and hour when the program is broadcast, the program name attribute which shows the title of the program, the category attribute into which the program contents are classified, and

the program list display means classifies the program information into groups on the basis of a value for a first program attribute arbitrarily selected from the plural program attributes and displays the program information which belong to the respective groups as a program list in a one-dimensional array having a second program attribute arbitrarily selected from the program attribute group on an axis.

7. The program list display device of any of Claims 1 to 6 wherein

the program list display means dynamically changes the number of program attributes constituting the program information when the program list is displayed.

8. The program list display device of any of Claims 1 to 6 wherein,

when the program list is displayed, the program list display means dynamically change between a case where a title of the program is displayed as the program name attribute for the program to be displayed and a case where a program group is constituted by plural related programs and a name of the program group to which the programs belong is displayed as the program name attribute.

9. The program list display device of any of Claims 1 to 6 comprising:

a designating means for designating an attribute value of the program attribute constituting the program information, wherein

the program list display means displays programs corresponding to an attribute value of the program attribute designated by the designating means on the program list, and

the program information comprises one or more program attributes of a channel attribute which shows a channel of the program, a date and hour attribute which shows broadcast date and hour of the program, a day-of-the-week attribute which shows a broadcast day of the week of the program, a time attribute which shows a broadcast time of the program, a program name attribute which shows a title of the program, and a media attribute which shows a storage medium in which the program is recorded.

10. The program list display device of Claim 9 wherein  
the designating means designates attribute values of the  
day-of-the-week attribute and the time attribute, and  
the program list display means displays programs having  
a broadcast day of the week and a broadcast time corresponding  
to the attribute values of the day-of-the-week attribute and  
the time attribute which values are designated by the  
designating means on the program list.

11. The program list display device of Claim 7 wherein  
the program list display means displays the program  
information as a program list in a two-dimensional array having  
the channel attribute and the date and hour attribute on two  
axes.

12. The program list display device of Claim 8 wherein  
the program list display means displays the program  
information as the program list in the two-dimensional array  
having the channel attribute and the date and hour attribute  
on two axes.

13. The program list display device of Claim 10 wherein  
the program list display means displays the program  
information as the program list in the two-dimensional array

having the channel attribute and the date and hour attribute on two axes.

14. A video recording and playback device which is installed in a broadcast receiver and records and plays back a video signal by employing storage media, comprising:

a video recording state list display means for dividing a whole storage area held by the storage media into successively accessible storage units for each recorded content to perform management thereof and displaying information concerning the storage units as a video recording state list on a display screen, wherein

the video recording state list display means displays a first storage unit in which recorded programs are stored, a second storage unit which is allocated to programs reserved for video recording, and a third storage unit which is unused on a single screen.

15. The video recording and playback device of Claim 14 comprising:

a video recording reservation means for designating an arbitrary storage unit from a storage unit group displayed on the video recording state list, thereby carrying out video recording reservation of the program in the storage unit.

10018970.022502

16. The video recording and playback device of Claim 15 wherein the video recording state list display means list-displays information of the storage units for the respective storage media on the video recording state list and also displays program information of the corresponding program with respect to the first storage unit and the second storage unit, and

the program information comprises one or more program attributes of the channel attribute which shows the channel of the program, the date and hour attribute which shows broadcast date and hour of the program, the program name attribute which shows the title of the program, and the category attribute which shows the category to which the program belongs.

17. The video recording and playback device of Claim 16 wherein the video recording state list display means dynamically changes the number of the program attributes constituting the program information when the video recording state list is displayed.

18. The video recording and playback device of Claim 16 wherein,

when the video recording state list is displayed, the video recording state list display means dynamically changes between a case where the title of the program is displayed as the program name attribute for the program to be displayed and a case where

20018970-032502



the program group is constituted by plural related programs and the name of the program group to which the programs belong is displayed as the program name attribute.

19. The video recording and playback device of Claim 17 wherein,

when the video recording state list is displayed, the video recording state list display means dynamically changes between a case where the title of the program is displayed as the program name attribute for the program to be displayed and a case where the program group is constituted by plural related programs and the name of the program group to which the programs belong is displayed.

20. The video recording and playback device of Claim 16 wherein,

when the program is reserved for video recording by the video recording reservation means, the video recording state list display means, in which the program group is constituted by the plural related programs, displays the vicinity of the storage unit in which the program which belongs to the same program group as the program reserved for video recording is recorded as a candidate of the storage unit which stores the program reserved for video recording.

21. The video recording and playback device of Claim 17 wherein,

when the program is reserved for video recording by the video recording reservation means, the video recording state list display means, in which the program group constituted by the plural related programs, displays the vicinity of the storage unit in which the program which belongs to the same program group as the program to be reserved for video recording is recorded as a candidate of the storage unit which stores the program to be reserved for video recording.

22. The video recording and playback device of Claim 20 or 21 wherein

the program group is constituted by programs having a series of program contents.

23. The video recording and playback device of any of Claims 16 to 21 comprising:

a program list display means for displaying program information for programs scheduled to be broadcast and program information for past recorded programs as a program list on a single screen wherein

the program list is employed for a selection of a program to be reserved for video recording, and

the program information comprises one or more program

attributes of the channel attribute which shows the channel of the program, the date and hour attribute which shows broadcast date and hour of the program, the program name attribute which shows the title of the program, the category attribute which shows the category to which the program belongs, and the media attribute which shows the storage medium in which the program is stored.

24. The video recording and playback device of Claim 23 wherein the program list display means displays the program information as a program list in a two-dimensional array having a first program attribute arbitrarily selected from the plural program attributes on a first axis and a second program attribute arbitrarily selected from the plural program attributes on a second axis.

25. The video recording and playback device of Claim 23 wherein the program list display means classifies the program information into groups on the basis of a value for a first program attribute arbitrarily selected from the plural program attributes and displays the program information which belong to the respective groups as the program list in the one-dimensional array having the second program attribute arbitrarily selected from the program attribute group on the axis.

26. The video recording and playback device of Claim 23 wherein the program list display means dynamically switches between a case where the program list display means displays the program information as the program list in the two-dimensional array having the first program attribute arbitrarily selected from the plural program attributes on the first axis and the second program attribute arbitrarily selected from the plural program attributes on the second axis and a case where the program list display means classifies the program information into groups on the basis of the value for the first program attribute arbitrarily selected from the plural program attributes and displays the program information which belong to the respective groups as the program list in the one-dimensional array having the second program attribute arbitrarily selected from the program attribute group on the axis.

27. The video recording and playback device of Claim 23 wherein the program list display means dynamically changes the number of the program attributes constituting the program information when the program list is displayed.

28. The video recording and playback device of any of Claims 24 to 26 wherein

the program list display means dynamically changes the number of the program attributes constituting the program information when the program list is displayed.

29. The video recording and playback device of Claim 23 wherein,

when the program list is displayed, the program list display means dynamically changes between a case where the title of the program is displayed as the program name attribute for the program to be displayed and a case where the program group is constituted by plural related programs and the name of the program group to which the programs belong is displayed as the program name attribute.

30. The video recording and playback device of any of Claims 24 to 26 wherein,

when the program list is displayed, the program list display means dynamically changes between a case where the title of the program is displayed as the program name attribute for the program to be displayed and a case where the program group is constituted by plural related programs and the name of the program group to which the programs belong is displayed as the program name attribute.